

Work Order ID 134519

Wednesday, July 08, 2015 3:18:04 PM

134519

Page 1

Item ID: D119-796-151

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: FWD Crosstube Installation with Step (no hardware)

Stop ***NS2***

Start Date: 7/07/15 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 7/07/15 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: MLJ Date: JUL 10 2015 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D119-796-151	D								

110 Document Control 0.00

110

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels as per PPP D119-796-151 chg 002

N/A MLJ OCT 05 2015

120 Pick Kit 0.00

120

Packaging

Packaging

Memo

0.00

Packaging

DAS
41
9-8

15-10-1

130 Crosstubes 0.00

130

Crosstubes

Memo

0.00

Crosstubes

1- Install step and clamp with the proper position per dwg D119-796-151

Torque all clamps to 50 IN-LBS max.

DAS
41
9-8

15-10-1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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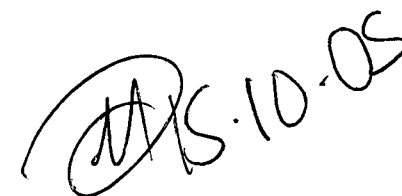
134519

Page 2

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Revision ID: Stop ***NS2***
Item Name: FWD Crosstube Installation with Step (no hardware)
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Required Date: 7/07/15 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC5- Inspect part completeness to step on W/O	0.00				1			DAS 38 9-89 OCT 05 2015
140									
QC	Memo	0.00							
Quality Control	***RE-CHECK TORCQUE ON CLAMP AS PER DWG.***								
150		0.00				1			
150	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D119-796-151								15-10-5
	For final Assembly								
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

ms OCT 05 2015


DQA: _____ Date: _____



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Picklist Print

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Page 1

Work Order ID: 134519

134519

Parent Item: D119-796-151

D119-796-151

Parent Item Name: FWD Crosstube Installation with Step (no hardware)

Start Date: 7/07/15

Required Date: 7/07/15

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP REV:A 14.09.09 NEW ISSUE DD VERF:JLM IPP
REV:B 14.11.19 AS PER REV.C DD VERF:JLM IPP REV:C
14.12.09 AS PER REV.PC6 DD VERF:JLM IPP REV:D 15-02-11
AS PER REV D JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D119-796-141		Manufactured	No				Each	1.0000		1			
D119-796-141									**				
FWD Crosstube Installation without Step (no hardware)													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				BSKT001				1					
				129310				1					
D5123-3		Manufactured	No				Each	52.0000		4			
D5123-3									**				
Clamp Cushion													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				LG055				13					
				133460				13					
				lg55				39					
				126747				12					
				127133				6					
				131871				21					
D5149-041		Manufactured	No				Each	3.0000		2			
D5149-041									**				
Fwd Step Base Assembly													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				LG055				3					
				131413				3					

DQA: _____ Date: _____



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Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong																				
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Misidentified ☐	☐ Past Due																								

Picklist Print

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Work Order ID: 134519

134519

Parent Item: D119-796-151

D119-796-151

Parent Item Name: FWD Crosstube Installation with Step (no hardware)

Start Date: 7/07/15

Required Date: 7/07/15

Start Qty: 1.00

Required Qty: 1.00

MS21920-22

Purchased

No

Each

104.0000

4

DAS

41

9-8

15-10-1

MS21920-22

Clamp

4

Location

132854

Loc Qty

Loc Code

LG050

104

M128636

3

M130822

2

M132045

4

M132275

45

M132550

50

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

ITEM	QTY	P/N	DESCRIPTION
	X	D119-796-151	XTUBE ASSY (AW119 MKII FWD)
1	1	D119-796-141	XTUBE ASSY (AW119 MKII FWD)
2	4	D5123-3	CUSHION
3	2	D5149-041	FWD STEP ASSEMBLY
4	4	MS21920-22	CLAMP

△

△

SHOP COPY

REV 12/14

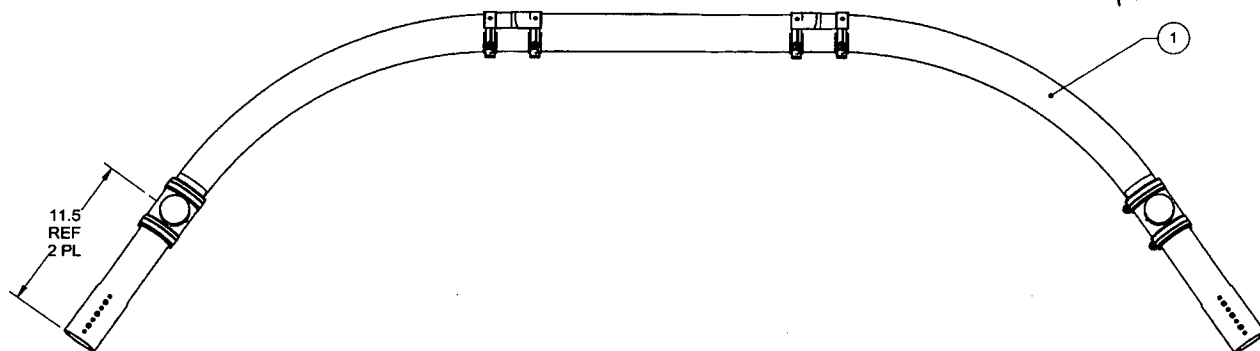
2014

UNCLASSIFIED

SECRET

NO 134519 MJS
1507-70

D119-796-141 XTUBE
BENDING PLANE



D119-796-151 XTUBE ASSY (AW119 MKII FWD)

RELEASED

2015 FEB 09

ECN 15-516 P

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.5
- 7) WEIGHT: 19.87 lbs
- 8) TORQUE MS21920-22 CLAMPS TO 50 IN-LBS MAX
- 9) LOCATE STEP USING POST FITTING ON CROSSTUBE

△

D	D5123-3 CLAMP CUSHION WAS D5123-9 CLAMP CUSHION, MS21920-22 WAS -24.	AP	15.01.19
C	RE-DESIGN STEP INSTALLATION	DB	14.11.24
B	D5149-043 WAS D5149-041, AN4C8A WAS AN4C10A, D2274 WAS D5153-1	AP	14.11.04
A	NEW ISSUE	AP	14.09.03
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	DB	DRAWING NO. REV. D	
MFG. APPR.	JLM	D119-796-151 SHEET 1 OF 1	
APPROVED	HS	TITLE SCALE	
DE APPR.	DS	XTUBE ASSY (AW119 MKII FWD) NTS	
DATE	15.01.19	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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